

Complete Summary

GUIDELINE TITLE

Guideline for isolation precautions: preventing transmission of infectious agents in healthcare settings 2007. Education and training.

BIBLIOGRAPHIC SOURCE(S)

Siegel JD, Rhinehart E, Jackson M, Chiarello L, Healthcare Infection Control Practices Advisory Committee. 2007 guideline for isolation precautions: preventing transmission of infectious agents in healthcare settings. Education and training. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 2007 Jun. 2 p.

GUIDELINE STATUS

This is the current release of the guideline.

This guideline updates a previous version: Centers for Disease Control and Prevention (CDC), Hospital Infection Control Practices Advisory Committee. Guidelines for isolation precautions in hospital infection control advisory committee. Atlanta (GA): Centers for Disease Control and Prevention (CDC); 1996 Jan 1. 38 p. (CDC prevention guidelines; no. 1/96). [97 references]

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SCOPE

DISEASE/CONDITION(S)

Healthcare-associated infections

GUIDELINE CATEGORY

Prevention

CLINICAL SPECIALTY

Infectious Diseases
Nursing
Preventive Medicine

INTENDED USERS

Advanced Practice Nurses
Allied Health Personnel
Health Care Providers
Hospitals
Nurses
Physician Assistants
Physicians

GUIDELINE OBJECTIVE(S)

- To provide infection control recommendations for all components of the healthcare delivery system, including hospitals, long-term care facilities, ambulatory care, home care and hospice
- To reaffirm Standard Precautions as the foundation for preventing transmission during patient care in all healthcare settings
- To reaffirm the importance of implementing Transmission-Based Precautions based on the clinical presentation or syndrome and likely pathogens until the infectious etiology has been determined
- To provide epidemiologically sound and, whenever possible, evidence-based recommendations

TARGET POPULATION

Patients and healthcare personnel in all settings where healthcare is delivered

INTERVENTIONS AND PRACTICES CONSIDERED

1. Job- and task-specific education and training on preventing transmission of infectious agents associated with healthcare
2. Provision of instructional material to patients and visitors on hand hygiene, respiratory hygiene/cough etiquette, and application of transmission-based precautions

MAJOR OUTCOMES CONSIDERED

Rates of transmission and acquisition of healthcare-associated infections

METHODOLOGY

METHODS USED TO COLLECT/SELECT EVIDENCE

Searches of Electronic Databases

DESCRIPTION OF METHODS USED TO COLLECT/SELECT THE EVIDENCE

Med-line and Pub Med were used to search for relevant studies published in English, focusing on those published since 1996.

The quality of studies, consistency of results and correlation with results from randomized, controlled trials when available were considered during the literature review and assignment of evidence-based categories to the recommendations in this guideline.

NUMBER OF SOURCE DOCUMENTS

Not stated

METHODS USED TO ASSESS THE QUALITY AND STRENGTH OF THE EVIDENCE

Expert Consensus

RATING SCHEME FOR THE STRENGTH OF THE EVIDENCE

Not applicable

METHODS USED TO ANALYZE THE EVIDENCE

Systematic Review

DESCRIPTION OF THE METHODS USED TO ANALYZE THE EVIDENCE

Not stated

METHODS USED TO FORMULATE THE RECOMMENDATIONS

Not stated

RATING SCHEME FOR THE STRENGTH OF THE RECOMMENDATIONS

The recommendations are categorized on the basis of existing scientific data, theoretical rational, applicability, and when possible, economic impact, as follows:

Category IA. Strongly recommended for implementation and strongly supported by well-designed experimental, clinical, or epidemiologic studies.

Category IB. Strongly recommended for implementation and supported by some experimental, clinical, or epidemiologic studies and a strong theoretical rationale.

Category IC. Required for implementation, as mandated by federal and/or state regulation or standard.

Category II. Suggested for implementation and supported by suggestive clinical or epidemiologic studies or a theoretical rationale.

No recommendation; unresolved issue. Practices for which insufficient evidence or consensus regarding efficacy exists.

COST ANALYSIS

A formal cost analysis was not performed and published cost analyses were not reviewed.

METHOD OF GUIDELINE VALIDATION

Peer Review

DESCRIPTION OF METHOD OF GUIDELINE VALIDATION

Not stated

RECOMMENDATIONS

MAJOR RECOMMENDATIONS

Definitions for the strength of recommendation grading (IA-IC, II, and no recommendation) are provided at the end of the "Major Recommendations" field.

Education and Training

II.A. Provide job- or task-specific education and training on preventing transmission of infectious agents associated with healthcare during orientation to the healthcare facility; update information periodically during ongoing education programs. Target all healthcare personnel for education and training, including but not limited to medical, nursing, clinical technicians, laboratory staff; property service (housekeeping), laundry, maintenance and dietary workers; students, contract staff and volunteers. Document competency initially and repeatedly, as appropriate, for the specific staff positions. Develop a system to ensure that healthcare personnel employed by outside agencies meet these education and training requirements through programs offered by the agencies or by participation in the healthcare facility's program designed for full-time personnel ("Guidelines for preventing," 1994; CDC, Boyce & Pittet, 2002; Larson et al., 2000; Pittet et al., 2000; Kidd, Heitkemper, & Kressel, 1999; Gould & Chamberlain, 1997; Calabro et al., 1998; Haiduven et al., 1998; Macartney et al., 2000; Sokas, Simmen, & Scott, 1993; Bonten, Kollef, & Hall, 2004; Lau et al., 2004; Diekema et al., 1995; Simor et al., 2002; O'Grady et al., 2002; Eveillard et al., 2001). **Category IB**

II.A.1. Include in education and training programs, information concerning use of vaccines as an adjunctive infection control measure (Bolyard et al., 1998; Harper et al., 2005; Talbot et al., 2005; "Immunization," 1997). **Category IB**

II.A.2. Enhance education and training by applying principles of adult learning, using reading level and language appropriate material for the target audience, and using online educational tools available to the institution (Jefte et al., 1999; Goldrick, Gruendemann, & Larson, 1993; Davis et al., 1999; Caffarella, 2001; Sargeant et al., 2004; Cole & Glass, 2004; Pfeiffer & Gilmore, 2000). **Category IB**

II.B. Provide instructional materials for patients and visitors on recommended hand hygiene and Respiratory Hygiene/Cough Etiquette practices and the application of Transmission-Based Precautions (Srinivasan et al., 2004; McGuckin et al., 2004; Cirone, 1997; Weinstock et al., 2000). **Category II**

Definitions:

Strength of the Recommendations

The recommendations are categorized on the basis of existing scientific data, theoretical rationale, applicability, and when possible, economic impact, as follows:

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Category IB. Strongly recommended for implementation and supported by some experimental, clinical, or epidemiologic studies and a strong theoretical rationale.

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No recommendation; unresolved issue. Practices for which insufficient evidence or consensus regarding efficacy exists.

CLINICAL ALGORITHM(S)

None provided

EVIDENCE SUPPORTING THE RECOMMENDATIONS

REFERENCES SUPPORTING THE RECOMMENDATIONS

[References open in a new window](#)

TYPE OF EVIDENCE SUPPORTING THE RECOMMENDATIONS

The type of evidence is identified and graded for each recommendation (see "Major Recommendations").

BENEFITS/HARMS OF IMPLEMENTING THE GUIDELINE RECOMMENDATIONS

POTENTIAL BENEFITS

Appropriate education and training to prevent the transmission of infectious agents in healthcare settings

POTENTIAL HARMS

Not stated

QUALIFYING STATEMENTS

QUALIFYING STATEMENTS

Much of the evidence cited for preventing transmission of infectious agents in healthcare settings is derived from studies that used "quasi-experimental designs", also referred to as nonrandomized, pre- post-intervention study designs. Although these types of studies can provide valuable information regarding the effectiveness of various interventions, several factors decrease the certainty of attributing improved outcome to a specific intervention. These include difficulties in controlling for important confounding variables; the use of multiple interventions during an outbreak; and results that are explained by the statistical principle of regression to the mean, (e.g., improvement over time without any intervention). Observational studies remain relevant and have been used to evaluate infection control interventions.

IMPLEMENTATION OF THE GUIDELINE

DESCRIPTION OF IMPLEMENTATION STRATEGY

An implementation strategy was not provided.

INSTITUTE OF MEDICINE (IOM) NATIONAL HEALTHCARE QUALITY REPORT CATEGORIES

IOM CARE NEED

Staying Healthy

IOM DOMAIN

Effectiveness
Safety

IDENTIFYING INFORMATION AND AVAILABILITY

BIBLIOGRAPHIC SOURCE(S)

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ADAPTATION

Not applicable: The guideline was not adapted from another source.

DATE RELEASED

1996 Jan (revised 2007 Jun)

GUIDELINE DEVELOPER(S)

Centers for Disease Control and Prevention - Federal Government Agency [U.S.]

SOURCE(S) OF FUNDING

United States Government

GUIDELINE COMMITTEE

Healthcare Infection Control Practices Advisory Committee (HICPAC)

COMPOSITION OF GROUP THAT AUTHORED THE GUIDELINE

Patrick J. Brennan, MD (*Chair*), Professor of Medicine, Division of Infectious Diseases, University of Pennsylvania Medical School; Michael Bell, MD (*Executive Secretary*), Division of Healthcare Quality Promotion, National Center for Infectious Diseases, Centers for Disease Control and Prevention; Vicki L. Brinsko, RN, BA, Infection Control Coordinator, Vanderbilt University Medical Center; E. Patchen Dellinger, MD, Professor of Surgery, University of Washington School of Medicine; Jeffrey Engel, MD, Head General Communicable Disease Control Branch, North Carolina State Epidemiologist; Steven M. Gordon, MD, Chairman, Department of Infectious Diseases, Hospital Epidemiologist, Cleveland Clinic Foundation, Department of Infectious Disease; Lizzie J. Harrell, PhD, D(ABMM), Research Professor of Molecular Genetics, Microbiology and Pathology, Associate Director, Clinical Microbiology, Duke University Medical Center; Carol O'Boyle, PhD, RN, Assistant Professor, School of Nursing, University of Minnesota; David Alexander Pegues, MD, Division of Infectious Diseases, David Geffen School of Medicine at UCLA; Dennis M. Perrotta, PhD., CIC, Adjunct Associate Professor of Epidemiology, University of Texas School of Public Health, Texas A&M University School of Rural Public Health; Harriett M. Pitt, MS, CIC, RN, Director, Epidemiology, Long Beach Memorial Medical Center; Keith M. Ramsey, MD, Professor of Medicine Medical Director of Infection Control, The Brody School of Medicine at East Carolina University; Nalini Singh, MD, MPH, Professor of Pediatrics, Epidemiology and International Health, The George Washington University Children's National Medical Center; Kurt Brown Stevenson, MD, MPH, Division of Infectious Diseases, Department of Internal Medicine, The Ohio State

University Medical Center; Philip W. Smith, MD, Chief, Section of Infectious Diseases, Department of Internal Medicine, University of Nebraska Medical Center

FINANCIAL DISCLOSURES/CONFLICTS OF INTEREST

Not stated

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GUIDELINE AVAILABILITY

Electronic copies: Available in Portable Document Format (PDF) from [Centers for Disease Control and Prevention \(CDC\) Web site](#).

AVAILABILITY OF COMPANION DOCUMENTS

None available

PATIENT RESOURCES

None available

NGC STATUS

This summary was completed by ECRI on April 25, 1999. The information was verified by the guideline developer on November 15, 1999. This NGC summary was updated by ECRI Institute on September 5, 2007.

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